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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/528,595

03/21/2005

Okten Gassner

WSP233US

8263

49003

7590

04/03/2008

MICHAEL L. DUNN
SIMPSON & SIMPSON, PLLC
5555 MAIN STREET
WILLIAMSVILLE, NY 14221

EXAMINER

SMALLEY, JAMES N

ART UNIT

PAPER NUMBER

3781

MAIL DATE

DELIVERY MODE

04/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,595	Applicant(s) GASSNER, OKTEN	
	Examiner JAMES N. SMALLEY	Art Unit 3781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 10-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/20/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites the limitation "the cap base" in line 1. There is insufficient antecedent basis for this limitation in the claim. Examiner assumes the term is meant to refer to the head plate, as introduced in line 2 of claim 10.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 10, 13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Thompson US 5,275,287.

Examiner notes the preamble of claim 10 is drawn to the intended use of the cap being placed on a container for carbonated beverages, and therefore the prior art must only teach a cap which is capable of being used in the intended manner, i.e. capable of being applied to containers for carbonated beverages. Examiner notes per the Abstract, the invention is designed to resist internal pressure and is thus likely intended to be applied to containers of carbonated beverages since they're known to create high internal pressures.

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Thompson '287 teaches a closure cap comprising a head plate (11), a roughly cylindrical cap (12) with an internal thread (13), an essentially-cylindrical inner sealing web (14) (Examiner notes the term "essentially" is read as if it were the word "substantially") with a continuous annular region projecting radially outwardly, an outer essentially-cylindrical sealing web (31), which combines with the inner sealing web to form a concentric intermediate space for receiving an upper portion of a bottle neck while permitting sealing contact of both the inner and outer sealing webs on the upper portion of the threaded neck, and limiting structures (43) are provided for limiting an axial depth by which the neck penetrates the intermediate space.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutt US 4,560,077 in view of Aichinger et al. US 4,489,845 and in view of Thompson US 5,275,287.

Dutt '077 teaches a closure cap "for use in applications which require a very tight seal such as on carbonated beverage containers" (column 1, lines 7-9), comprising a head plate (12), a roughly cylindrical cap (14) with an internal thread (18), an essentially-cylindrical inner sealing web (30) (Examiner notes the term "essentially" is read as if it were the word "substantially"), an outer essentially-cylindrical sealing web (32), which combines with the inner sealing web to form a concentric intermediate space for receiving an upper portion of a bottle neck while permitting sealing contact of both the inner and outer sealing webs on the upper portion of the threaded neck, and limiting structures comprising a stop (50) and a continuous annular bead (44) provided radially outside the outer sealing web provided for limiting an axial depth by which the neck penetrates the intermediate space.

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The reference as applied teaches all limitations substantially as claimed, but does not teach the inner sealing web having a radially outwardly continuous annular region.

Aichinger '287 teaches an inner sealing web with a radially outwardly continuous annular sealing projection (16) for sealing against the bottle inner surface. The rounded configuration will allow the flange to seal the inner surface of the bottle, regardless of how much the inner sealing web is angularly deflected.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the inner sealing web of Dutt '077, providing the radially outwardly projecting annular sealing flange to the inner sealing web, as taught by Aichinger '287, motivated by the benefit of providing a seal which will remain in contact with the container inner surface no matter how much the inner wall is angularly deflected.

Furthermore, Dutt '077 as applied above teaches all limitations substantially as claimed, but does not teach the limiting structure being formed of a plurality of structures.

Thompson '287 teaches it is known to form discrete stops (43) which prevent treaded advancement of a closure cap onto a container.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure cap of Dutt '077, forming the stop (10) in a plurality of segments, as taught to be known by Thompson '287, motivated by the benefit of reducing the amount of material used in the construction of the cap. Furthermore, Examiner notes it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

As such, the resultant structures can be considered "webs", per claim 13.

Regarding claims 11-12, it is not clear from the disclosure of Dutt '077 what the exact distances are between the sealing flanges. However, Examiner notes the disclosure of Dutt '077, column 5, lines 38-55 teaches it is known to form the cap in different sizes.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the size of the cap of Dutt '077 in view of Thompson '287, forming the intermediate

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space between the inner and outer sealing flanges to less than 2 mm, less than 1 mm, or to any other suitable distance, motivated by the benefit of being able to apply the cap to a thin-walled beverage container. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claims 14-15, it is not clear from the disclosure of Dutt '077 what the exact axial height of the limiting webs should be. However, Examiner notes the disclosure of Dutt '077, column 5, lines 38-55 teaches it is known to form the cap in different sizes.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the size of the cap of Dutt '077 in view of Thompson '287, forming the axial height of the limiting stops to between 0.3 and 2 mm, to between 0.5 to 3 mm, or to any other suitable height, motivated by the benefit of controlling the depth of the container into the intermediate space, and thus the degree of sealing of the cap with respect to the container. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Furthermore, Examiner notes it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claim 16, the webs (43) of Thompson '287 are taught to be equally distributed at 45 degrees. Thus it would be obvious to form the stop of Dutt '077 in equally distributed segments.

Regarding claim 17, Examiner notes the disclosure of Thompson '287 teaches that the embodiment of 8 webs at 45 degrees separation about the cap is just "...one example..." of the distribution of the stops about the cap inner surface. The reference teaches "a number of stops are formed..." Thus, one of ordinary skill would recognize that the total number of stops could vary.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cap of Dutt '077 in view of Thompson '287, providing six stops equally about the cap, which would result in 60 degrees of separation between each stop, or any other number of stops equally distributed about the cap, motivated by the benefit of reducing the amount of material used in the construction of the closure cap. Furthermore, Examiner notes it has been held that discovering an

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optimum value of a result-effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 19, Examiner notes Dutt '077 teaches endwall anti-doming ribs (70) which, as seen in figure 1, make the combined thickness of the head plate thicker at that location, than the minimum thickness on either side of the stop (50).

Regarding claim 20, Dutt '077 does not teach the thickness of the cap base (end plate) in a region of the intermediate space being 5% to 15% smaller than a web thickness of the cap base in the region immediately radially inside the inner sealing web. However, Examiner notes that presence of anti-doming ribs (70) prevents

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: See attached PTO-892 citing relevant references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES N. SMALLEY whose telephone number is (571)272-4547. The examiner can normally be reached on Monday - Friday 10 am - 7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on (571) 272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James N Smalley/
Examiner, Art Unit 3781

/Anthony D Stashick/
Anthony Stashick
Supervisory Patent Examiner, Art Unit 3781